

Fig. 1A

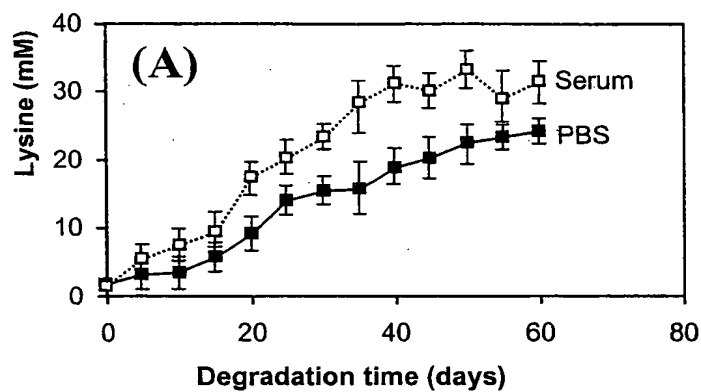


Fig. 1B

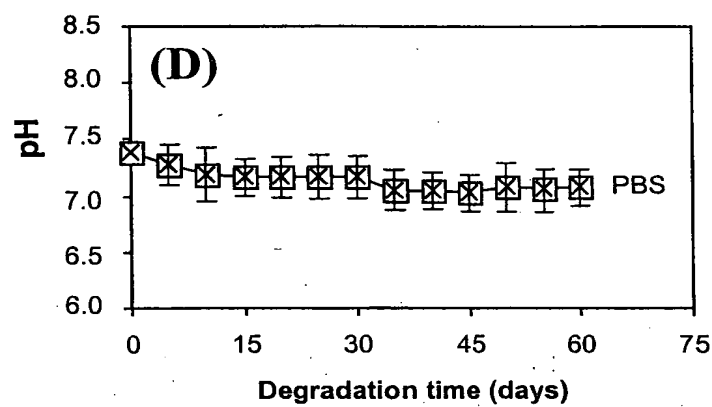
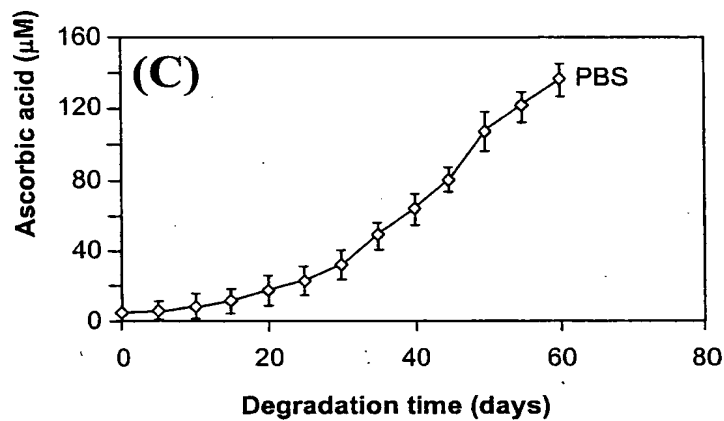
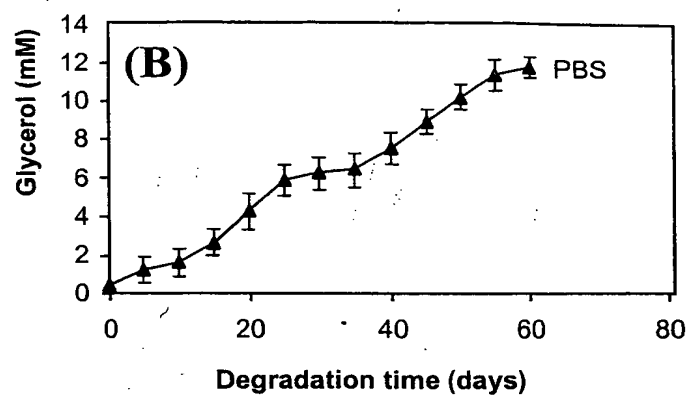


Fig. 1C

Fig. 1D

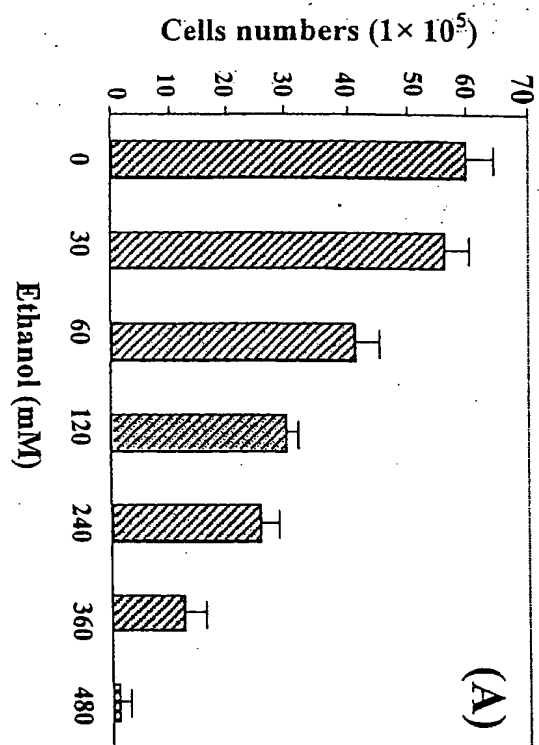


Fig..2A

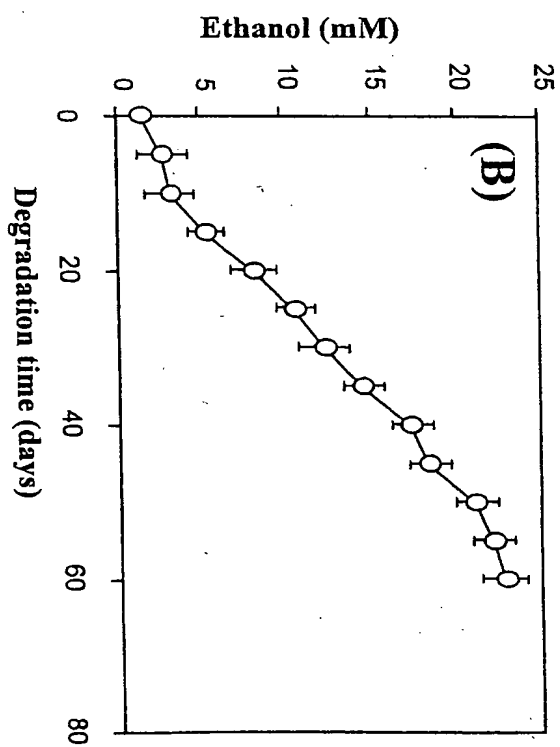


Fig. 2B

Fig. 3A

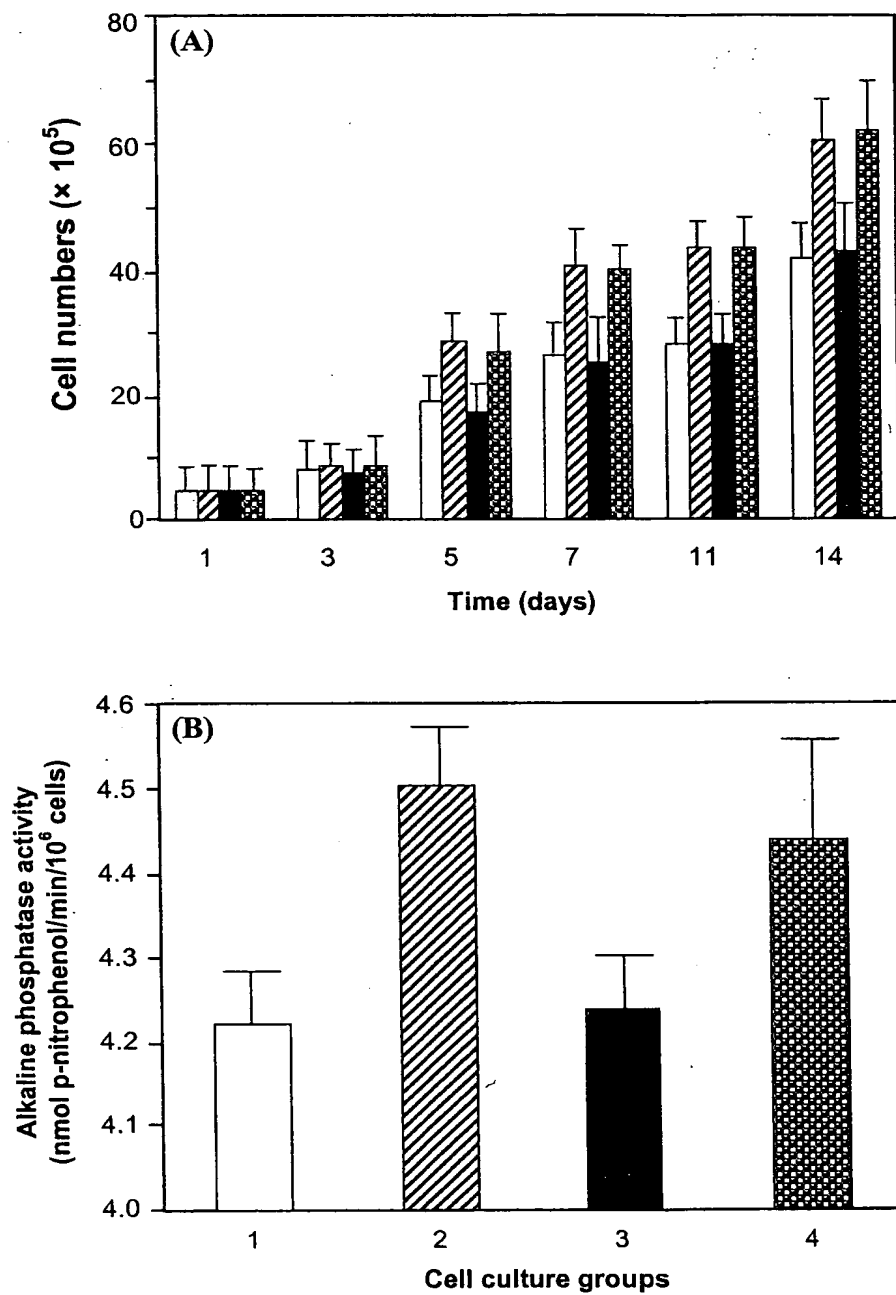


Fig. 3B

Lane	GAPDH				Collagen I				TGF-β1			
	Intensity (7 days)	%	Intensity (14 days)	%	Intensity (7 days)	%	Intensity (14 days)	%	Intensity (7 days)	%	Intensity (14 days)	%
1	1609	100.00	1741	100.00	865	100.00	299	100.00	1516	100.00	1422	100.00
2	1614	100.31	1730	99.37	1254	144.97	416	139.13	1915	126.32	2014	141.63
3	1580	98.20	1754	100.75	790	91.33	205	68.56	1480	97.63	1378	96.91
4	1628	101.18	1767	101.49	1131	131.75	409	136.79	2028	133.17	1828	128.55

Fig. 4A

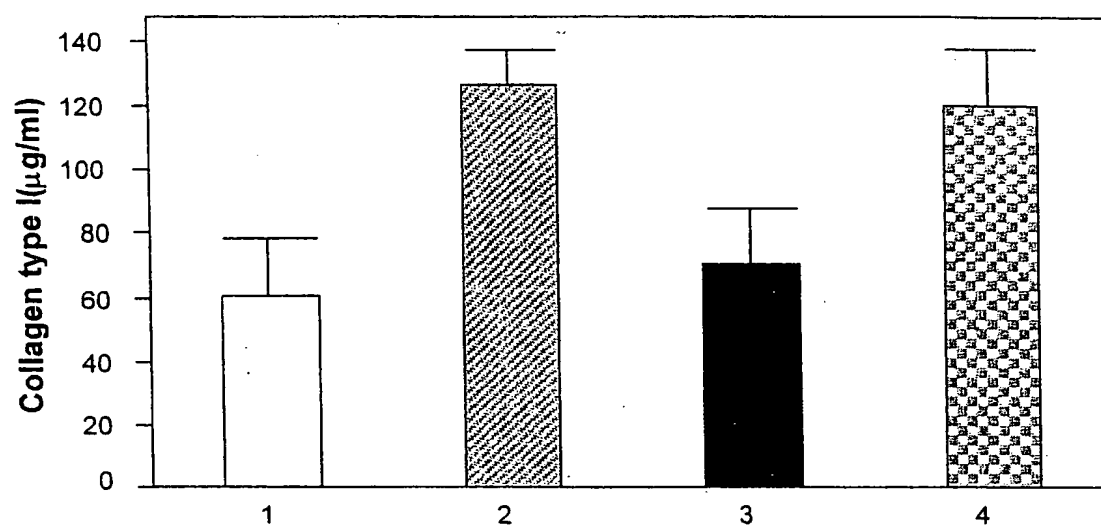


Fig. 4B

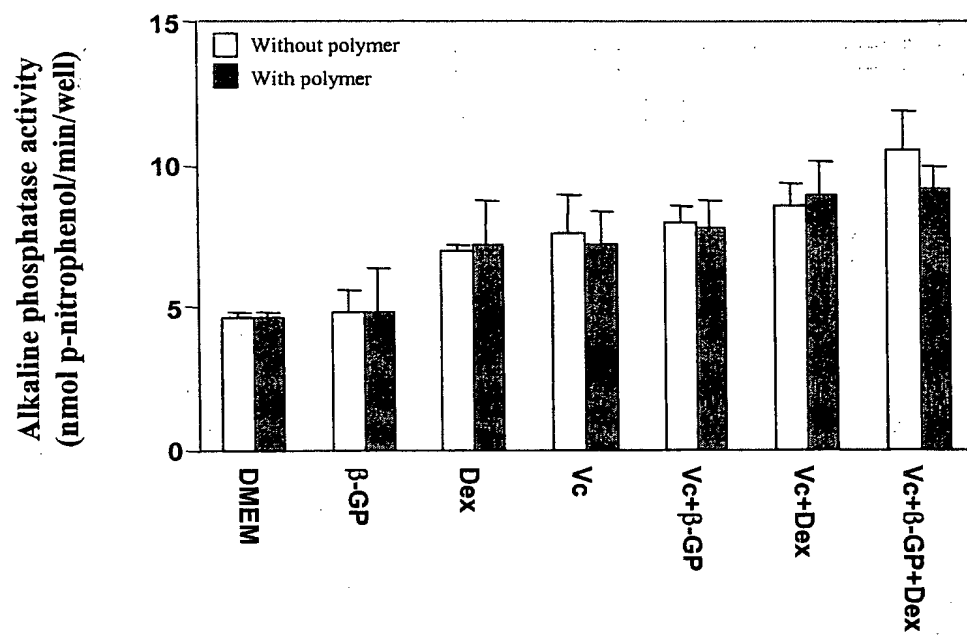
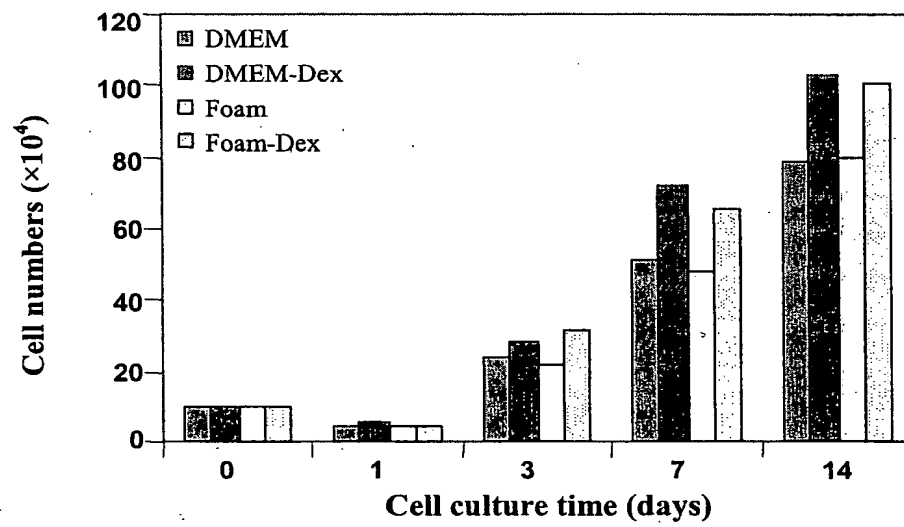


Fig. 5

Fig. 6



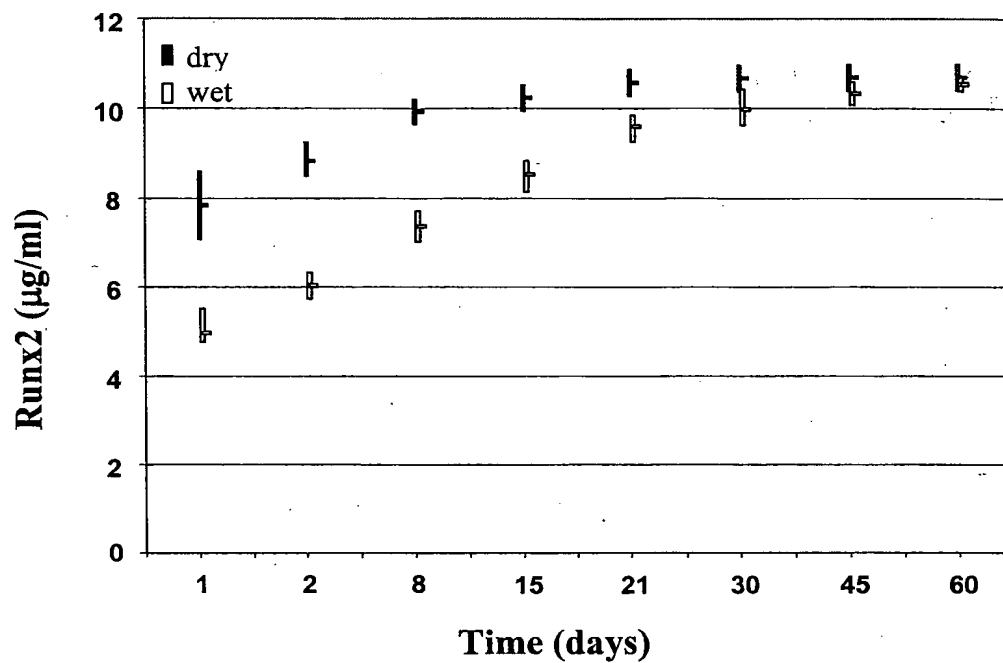
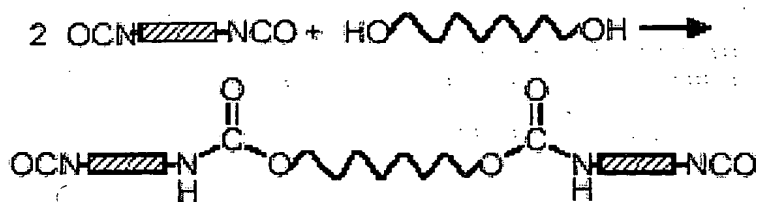
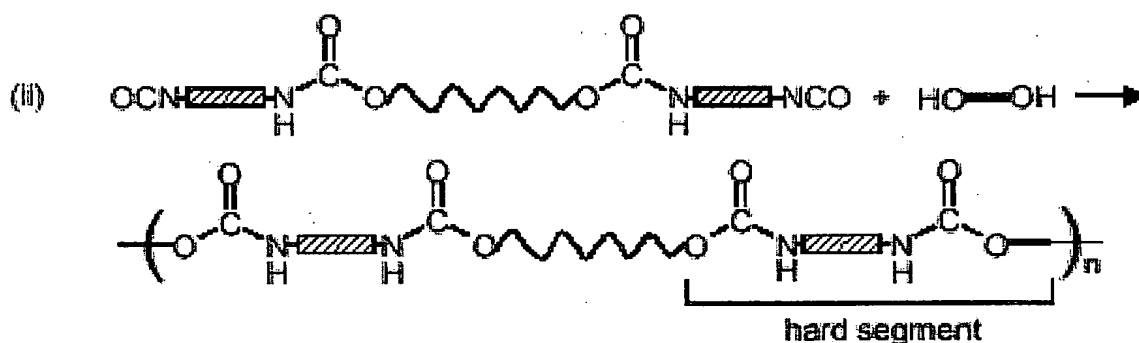
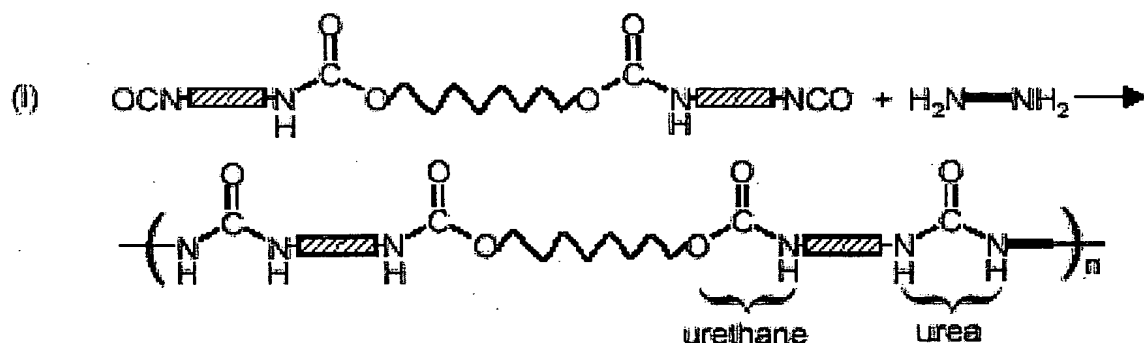


Fig. 7



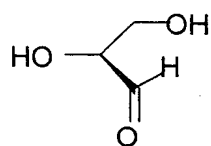


(a) An NCO-terminated prepolymer prepared by reacting two moles of diisocyanate with one mole of a long-chain hydroxyl-terminated diol.

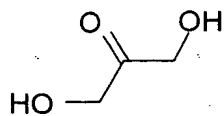


(b) Polyurethanes prepared by reacting equimolar quantities of an NCO-terminated prepolymer with (i) a short-chain diamine chain extender (yielding urea linkages) and (ii) a short-chain diol chain extender (yielding urethane linkages). The diisocyanate and chain extender comprise the hard segment.

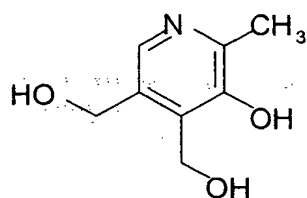
Fig. 8.



L-glyceraldehyde

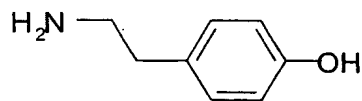


dihydroxyacetone

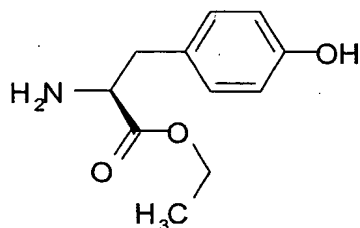


pyridoxine

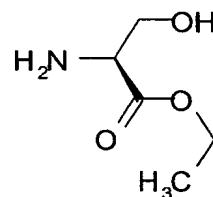
Fig. 9A Natural metabolites with diol functionality yielding urethane diols when coupled with a diisocyanate.



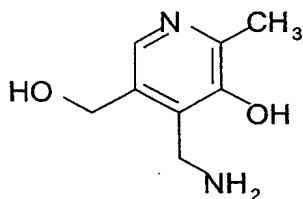
tyramine



L-tyrosine ethyl ester

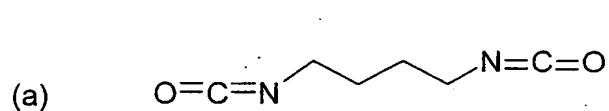


L-serine ethyl ester

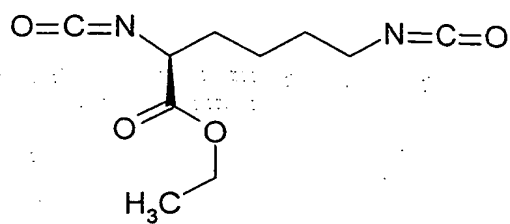


pyridoxamine

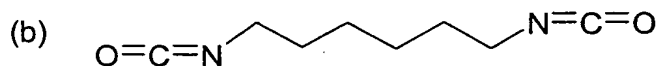
Fig. 9B Natural metabolites with amine and hydroxyl functionality yielding urea diols when coupled with a diisocyanate.



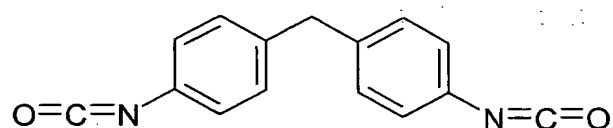
butane diisocyanate



L-lysine ethyl ester diisocyanate

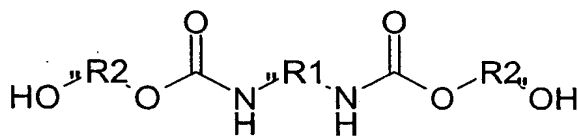


hexamethylene diisocyanate (HDI)

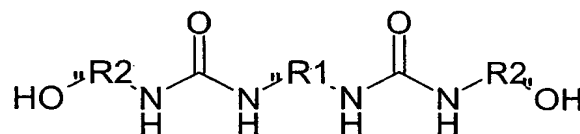


4,4'-methylenebis(phenylisocyanate) (MDI)

Figs. 10A and 10B.



(a) diurethane diol



(b) diurea diol

Figs. 11A and 11B

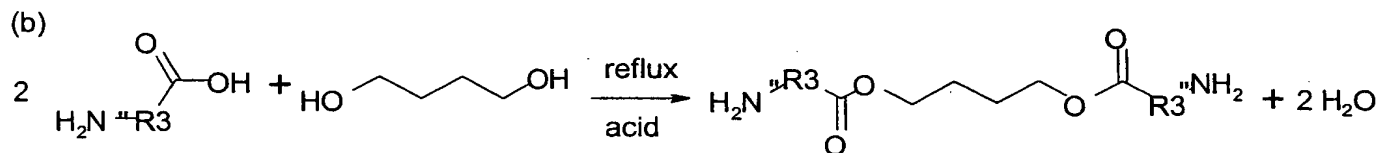
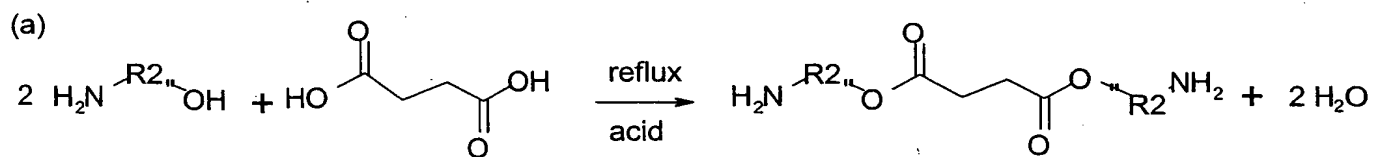
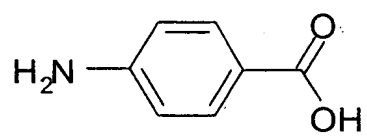
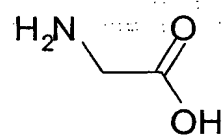


Fig. 12A and 12B.



*p*-aminobenzoic acid



glycine

Fig. 13.

R

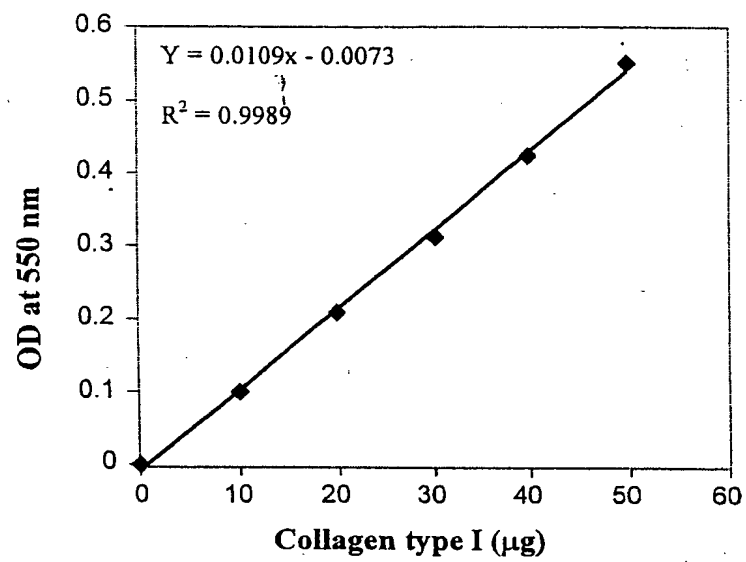


Fig. 14